A. BACKGROUND AND RATIONALE OF THE TRIAL

1. **Provide the following information about the proposed study: the title, the investigators, address, phone and fax numbers.**

Title:	"Phase I Study of HLA-B7 Plasmid DNA/DMRIE/DOPE Lipid Complex as an Immunotherapeutic Agent in Renal Cell Carcinoma by Direct Gene Transfer with Concurrent Low Dose Bolus IL-2 Protein Therapy"
Principal Investigators:	Robert A. Figlin, M.D.
Institution:	UCLA Medical Center University of California, Los Angeles 200 Medical Plaza, Suite 510 Los Angeles, CA 90024-7050

2. **Provide a brief rationale for the clinical trial.**
This proposed Phase I combination therapy protocol will involve intralesional administration of Allovectin-7 just prior to an intravenous regimen of injections of an FDA approved interleukin-2 recombinant protein (Proleukin®) in patients with renal cell carcinoma who will receive IL-2 therapy as part of their treatment regimen. Thereofre, the Allovectin-7 gene therapy regimen is being added to a standard care regimen of IL-2 therapy in renal cell carcinoma patients.

The intended goal is to provide two mechanisms for enhancing the immune response: 1) transfecting the tumor cells with HLA-B7 and 2) up-regulating the immune response with exogenous IL-2.

A summary of clinical and laboratory data collected from an earlier Phase I study of Allovectin-7 (VCL-1005) is provided in section 2.3 of the proposed clinical protocol, submitted with this cover sheet.

As in the earlier Phase I protocols, we will introduce the gene encoding the allogeneic human transplantation antigen, HLA-B7, into tumors *in vivo*. Therefore, the gene therapy aspects of this protocol are identical to the phase I protocols previously approved by RAC. However, there is the additional element of stimulation of the immune response with Interleukin-2, delivered intravenously following gene therapy.

The objectives of the proposed Phase I combination protocol are:

a) To determine safety and toxicity of a combination therapy regime consisting of direct intralesional injection of Allovectin-7, an HLA-B7 plasmid DNA/DMRIE/DOPE lipid mixture (VCL-1005) and low dose bolus IL-2 protein immunotherapy in patients with renal cell carcinoma.

b) To observe the clinical response elicited by the Allovectin-7/IL-2 immunotherapy.